

ABSTRACT OF THE DISCLOSURE

5 A method for matching an input pattern with a number of  
stored reference patterns using a dynamic programming  
matching technique is described. The reference patterns  
of a reference signal which are at the end of a dynamic  
programming path for a current input pattern are listed  
10 in an active list. The dynamic programming paths are  
propagated by processing the reference patterns on the  
active list, and a new active list is generated for the  
succeeding input pattern. The amount of processing  
required for each pattern on the active list is reduced  
by using a pointer which identifies the reference pattern  
15 which is the earliest in the sequence of patterns of the  
current reference signal listed on the new active list  
during the processing of a preceding dynamic programming  
path. In a second aspect, a speech recognition interface  
is used as a control system for a telephony system.